Pharmacological Sciences Training Program
(Updated: 7/2015)

Course Requirements

Requirements for the Ph.D. are those established by the graduate school. The majority of course work will be selected in consultation with the Director of Graduate Studies of your department and your thesis committee. There are five required courses: (1) Essentials of Pharmacology and Toxicology (Pharmacology 533), (2) Interdisciplinary Approach to Pharmacology (Pharmacology 534), (3) Experimental Design and Biostatistics for Basic Biomedical Scientists, Pharmacology 733, (4) Innovations-Drug Development (Pharmacology 835) (4) student seminar (Pharmacology 780S). Pharmacology 533 provides an introduction to the basic of Pharmacology (pharmacokinetics, drug:receptor interactions, drug design) and Pharmacology 534 provides an insight into the clinical use of drugs by showing how drugs perform in bodies and are used to treat disease. Student seminar provides students with opportunities to develop presentation skills by presenting their own research as well as an opportunity to review the work being presented by our outside seminar speakers.

Students are also required by to attend at least 18 hours of RCR training. This typically includes 12 hours of RCR orientation at Beaufort, 2 hours of Graduate School or RCR forums, and a 4 hour course in year 3. Current RCR requirements in Chemistry and BME do not meet NIH standards, and so students must receive additional training. Students outside of Pharmacology and Cancer Biology will be permitted to go to Beaufort to meet this requirement.

Students are expected to have some background in cell biology, molecular biology and physiology. If they do not, students are encouraged to use electives to gain this proficiency. Physiology is particularly important, as it provides the basis for material learned in Pharmacology 234. Grades in all Pharmacology courses must be G or better. Students who obtain an S in a non-Pharmacology course will receive a letter of notice from the Director of the Program, and students who receive more than one S can be dropped from the PSTP.

Students in Pharmacology normally take the core courses during the first year, while students in other participating departments can take these courses during the second year, or take them out of sequence. Students only need to complete the Pharmacology courses by the time they finish their course work. The exact timing will be decided upon consultation with individual students.

Other Program Activities

Students are required to attend an annual evaluation meeting in the fall with two PSTP faculty members who will serve as your PSTP mentors throughout your graduate school career. At these meetings, they will review progress including coursework, lab selection, committee meetings and job selection at graduation. The purpose of this meeting is primarily advisory: the PSTP mentors can provide another source of advice beyond that provided by the home department.

The PSTP offers a monthly lunch and seminar program for trainees. This has both a social and professional function. Students have a chance to meet other students in the program on a regular basis. In addition, there will be speakers who discuss professional development issues, ranging from graduate school issues like lab selection and preliminary examinations as well as talks by Pharmacologists who are working in a variety of environments, including academic, government and industry.
The PSTP also provides funds for travel to scientific meetings during the two year period of support. The program provides on average $600-$800 for each trip. Students can receive this support whether they are presenting data or not. Trainees should contact Dr. Kuhn with the details of the proposed travel.

Students are encouraged to participate actively in all functions sponsored by the Department of Pharmacology and Cancer Biology, including the weekly Signal Transduction Seminar. All PSTP trainees are invited to attend the annual retreat for the Department of Pharmacology and Toxicology. This is held in the fall in Wilmington. The PSTP will pay your expenses. This provides an opportunity to present your work, interact with other students and also enjoy a weekend at the beach.

Contact information:

Jamie Baize-Smith is the administrative coordinator who will be your contact person. Her office is in C238 LSRC. Her phone number is 613-8600. Email is baize@duke.edu. Contact Jamie about all paperwork regarding assignment to the program, tuition and fees, payroll, etc.

Dr. Cynthia Kuhn is the Principal Investigator responsible for the program. Her office is in Room151C LSRC. Phone number is 684-8828. Email is ckuhn@duke.edu. Contact Dr. Kuhn about all academic and program questions.